

the past two years, the clinical laboratory at Mount Zion Hospital and Medical Center, San Francisco, has been linked to several physicians' offices by means of remote terminals.

The clinical laboratory uses a Data General C330 Eclipse central processing unit and Medical Information Technology software for workload organization and data management. The laboratory services include hematology, chemistry, virology, microbiology and blood banking. The data are available at several on-site peripheral terminals.

The terminals used consist of a single unit housing a keyboard, 80 column printer, 300 baud modem and power supply. Five such units are in use. The modem is directly connected to the telephone line.

The operation is simple to initiate. The hospital computer phone is dialed. When the characteristic tone is heard, indicating that contact has been established, the power and modem are switched on. The printer requests entry codes which are then typed in. If the entry codes are appropriate, it is possible to obtain information by selecting a given test or a given patient. A permanent copy is obtained and, by pressing the copy switch on the terminal, the data stored in the buffer are presented to the printer again for a second copy.

The clinical usefulness of personal computers in the physician's home linked by telephone to the laboratory computer has recently been described.¹ This report relates to linking terminals in physicians' offices with the laboratory computer.

Both physicians and their patients benefit by the availability of inpatient and outpatient lab data 24 hours per day. The information is available as soon as the tests are completed and entered into the computer. Thus, there is no need to initiate a communication with various clerical personnel in the laboratory to obtain reports and, accordingly, errors and time spent awaiting responses are decreased.

A physician can access the entire laboratory record, thereby eliminating the necessity for several calls to different laboratory departments such as hematology or virology.

There are several clinical applications of remote accessing of the laboratory computer. Prior laboratory data on a new office patient are readily available by means of the remote linkage to the laboratory computer. This facilitates the doctor's evaluation of the patient.

Another advantage of the remote accessing of the laboratory computer is the ability to quickly obtain test results such as prothrombin time, potassium, digoxin and quinidine levels. Patients frequently request reports that have not yet arrived in the doctor's office by the usual route of delivery.

This information is easily accessible from the laboratory computer.

Patients in hospital can also be followed with the office terminal. Data can be assembled by the computer and printed by a local terminal. It is frequently useful to see the chronological arrangement of hemoglobins, hematocrits, enzymes, liver function tests and so forth.

Summary

Remote accessing of inpatient and outpatient laboratory data 24 hours a day allows the physician to obtain important information rapidly. Errors and inconveniences caused by intermediary personnel are reduced. Thus, the physician and the patient are brought in closer contact with the data by means of remote telephone linkage of the doctor's office to the hospital computer.

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REFERENCE

1. Russell S, Uhley H: Clinical usefulness of a personal computer (Letter). JAMA 1983 Jan 21; 249:350

Satan's Malady

(A Cry for Help From a Fellow Physician Who Shall Be Nameless)

My bladder is my master; I shall know no rest.

It tormenteth my days with frequency: it maketh my nights hellish.

From raging cystic waters, misery and embarrassment follow me, no matter wherst I go.

Yea, though I subsist on but sips of fluids with but scant morsels of food and avoideth alcohol and condiments, constant torment is my measure; interstitial cystitis is with me; it brings everlasting distress and duress.

I goeth to the lairs of urologists: they peek, peer, shake their heads and say with no enthusiasm, "Come back in a year"; then I seek the supertherapists: all say, "No help here."

Sadly, struggling with odors, damp and zippers shall follow me all the days of my life: and I shall dwell handy to a commode for ever.

ANON